

CLAIMS

1. A method of redirecting information in a segmented virtual machine (VM) comprising:
 - 5 sending information to a shell VM; and redirecting the information to bypass the shell VM.
2. The method of claim 1, further including establishing a connection between an external application and the shell VM.
3. The method of claim 1, further including establishing a second connection 10 between the shell VM and a core VM.
4. The method of claim 1, further including:
 - establishing a first connection between an external application and the shell VM;
 - establishing a second connection between the shell VM and a core VM; and
 - stitching the first connection and the second connection.
- 15 5. The method of claim 1, wherein redirecting includes receiving the information at a switch.
6. The method of claim 1, wherein the information is redirected to a core VM.
7. The method of claim 1, wherein the information is redirected to an external application.
- 20 8. The method of claim 1, wherein the information is included in a TCP packet or TCP connection.
9. The method of claim 1, wherein a packet received by a core VM appears to have been sent by the shell VM.

10. The method of claim 1, wherein a packet received by an external application appears to have been sent by the shell VM.
11. The method of claim 1, wherein redirecting includes translating an address within a packet.
- 5 12. The method of claim 1, wherein the shell VM and a core VM communicate over a separate communications link.
13. The method of claim 1, further including determining that the information should be redirected.
14. The method of claim 1, wherein the shell VM determines whether to redirect the 10 information.
15. The method of claim 1, wherein a core VM determines whether to redirect the information.
16. The method of claim 1, wherein the information is redirected once a connection associated with the information lasts longer than a certain period of time.
- 15 17. The method of claim 1, wherein the information is redirected once a connection associated with the information sends more than a certain number of packets.
18. The method of claim 1, wherein the information is redirected once the shell VM device carries a certain load.
19. The method of claim 1, further including:
20 receiving a message indicating that the information sending has been completed;
and
sending a control message.
20. The method of claim 1, further including:

receiving a message indicating that the information sending has been completed;

and

forwarding the message.

21. The method of claim 1, further including:

5 receiving a message indicating that the information sending has been completed;
translating the message; and
sending the translated message.

22. The method of claim 1, wherein a device that includes a switch and a core VM
redirects the information.

10 23. The method of claim 1, wherein a device that includes a switch and the shell VM
redirects the information.

24. The method of claim 1, wherein a device that includes the shell VM, a core VM,
and a switch redirects the information.

25. A method of evaluating whether to redirect information comprising:

15 sending a discovery packet;
receiving a reply to the discovery packet; and
determining whether a switch is capable of stitching based on the reply.

26. The method of claim 22, further including determining the number of ingress and
egress points on a device.

20 27. A method of responding to a discovery packet comprising:
receiving the discovery packet at a switch; and
sending a response indicating a capability of the switch.

28. The method of claim 24, further including determining whether the switch is one hop away from the device that sent the discovery packet.
29. A system for redirecting information in a segmented VM comprising:
 - a device configured to send information to a shell VM; and
 - 5 a switch configured to redirect the information to bypass the shell VM.
30. The system of claim 26, wherein the device includes an external application.
31. The system of claim 26, wherein the device includes a core VM.
32. A system for evaluating whether to redirect information, comprising:
 - a shell VM configured to:
 - 10 send a discovery packet;
 - receive a reply to the discovery packet; and
 - determine whether a switch is capable of stitching based on the reply; and
 - a switch configured to send a reply to the discovery packet.
33. A system for responding to a discovery packet, comprising:
 - 15 a shell VM configured to send the discovery packet; and
 - a switch configured to:
 - receive the discovery packet; and
 - respond with a capability of the switch.

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